

The Problem of Professional Burnout of Railway Personnel

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Abstract—Professional burnout is a burnout syndrome associated with a person's professional activity. This article addresses issues of professional burnout. The concept of the “professional burnout” term is revealed, its assessment tools are described, the reasons for the professional burnout of conductors are analyzed, recommendations for reducing it are systematized.

Keywords—professional burnout, emotional burnout, resistance, exhaustion, a three-component model of the professional burnout syndrome

I. INTRODUCTION

In recent years, the problem of professional burnout has become urgent. It is especially acute in professions that are directly related to interaction with people: personnel managers, managers at various levels, medical and social workers, personnel service workers, etc. [1-5].

The work of the passenger car conductor, in the opinion of Russian scientists, is one of the most distorting personality types of professional activity. On the one hand, it has a number of features that make it possible to characterize it as potentially affectogenic, due to the presence of a large number of stress factors constantly present in the work of the conductor. On the other hand, the prevailing complex of economic and socio-psychological problems, as well as the decline of the prestige of the conductor profession lead to extreme emotionality and tension [6].

Professional burnout as a consequence of the intensification of labor affects the state of the personnel's work activities and their effectiveness. Professional burnout is a psychological defense mechanism developed by an individual in the form of complete or partial elimination of emotions in response to selected traumatic effects. This is a set of negative experiences associated with the work, the team and the organization as a whole. It is one of the types of professional deformation of the personality. Preventive measures to avoid professional burnout among employees is of great importance [6].

The identification of criteria and the assessment of the professional level of burnout in the profession is an important component in the study of professional burnout [7,8]. The signs that characterize professional burnout are presented in Figure 1.

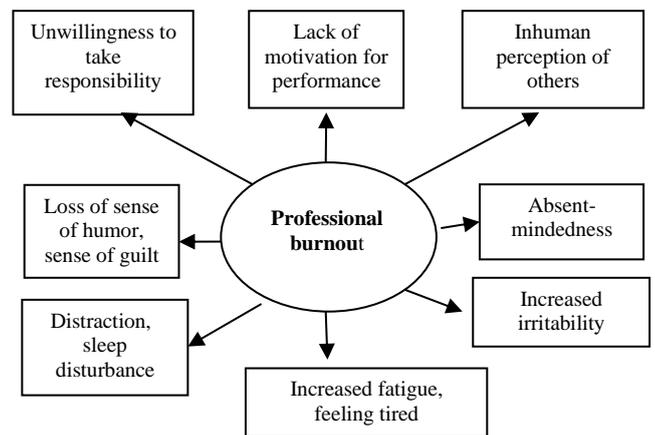


Fig 1. Symptoms of burnout

Thanks to the scientists studying this phenomenon, it is now easier to identify professional burnout among employees, since quite a lot of author's techniques have been developed for this case. The examples of techniques aimed at identifying professional burnout are presented in Table 1.

To determine the program for the prevention of professional burnout in an organization, it is necessary to introduce diagnostic measures that allow determining the main aspects of the state of the socio-psychological atmosphere in the organization, and then identifying the burning state of each individual employee in the organization.

In our case, the assessment of professional burnout was based on the diagnosis of personal qualities and the state of the psychological status of employees, which was determined by the most effective diagnostic methods in this area.

TABLE I METHODS FOR ASSESSMENT OF PROFESSIONAL BURNOUT

Author	Methods	Essence
N.Vodopyanova E. Starchenkova	Questionnaire, professional burnout (MBI)	The questionnaire is based on the three-factor model by K. Maslach and S. Jackson. The technique is intended for the diagnosis of "emotional exhaustion", "depersonalization" and "reduction of professional achievements".
V. Kapponi T. Novak	Questionnaire "Express-burnout assessment"	The questionnaire was compiled to identify the level of assertiveness among employees.
V. Boyko	Diagnosis of burnout	The technique allows to diagnose the leading symptoms of "emotional burnout," and determine which phase of stress development they belong to.
A.A. Rukavishnikova	"The definition of mental burnout"	This technique is aimed at an integrated diagnosis of mental "burnout", including various personality substructures.
V.A. Vinokur	Questionnaire "Attitude to work and professional burnout"	Reflects certain emotional reactions and styles of work attitudes among employees of "helping" professions in the process of burnout development.

II. METHODS AND MATERIALS

According to the observation, the majority of conductors are subject to the syndrome of professional burnout. Very often in interpersonal communication (between employees) there is irritability, aggressiveness, negative attitude towards people. From the point of view of doing work, there is indifference to work in general, and to the employer, reducing the need for growth and development, unwillingness to take part in the

activities of the company. All the listed manifestations of the syndrome are explained by the fact that the guides are constantly in the process of active communication with passengers (some of whom are negatively tuned), constantly face unforeseen circumstances, their working conditions are very changeable.

In order to experimentally confirm the observation data in the diagnostic process, the following methods were used: by V.V. Boyko, by N. E. Vodopyanova (K. Maslach and S. Jackson).

The study covered 80 conductors of the Yenisei branch of JSC FPC with work experience from one to five years. Based on the analysis of the socio-demographic structure, it can be revealed that the staff structure is dominated by the employees aged 30 to 40 years (64.47%); the employees mainly have higher education (33.96%) and secondary education (33.02%); 38.05% of conductors have work experience of 5 to 10 years. It should be noted that the turnover rate among the conductors was 2.4% in 2018, which is the highest indicator in the organization.

The techniques chosen correspond to the goals of our research and allow to accomplish the tasks set. All the methods are standardized. As a result of the diagnosis, it can be seen that, in general, a professional team needs work to correct emotional burnout.

III. RESULTS

According to the method of emotional burnout by Boyko V.V. used for analyzing the severity of stress phases, it can be concluded that 33.3% of respondents have professional burnout, 40% of respondents are at the stage of burnout formation, and only 26.7% of conductors can say that burnout did not occur. This analysis is graphically presented in Figure 2.

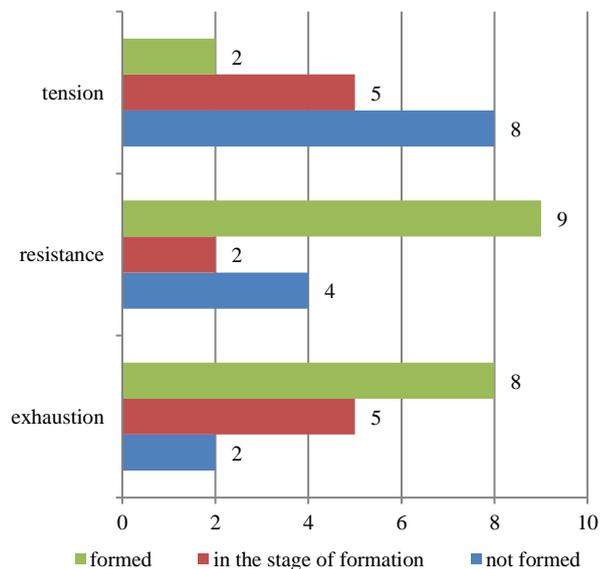


Fig. 2. The intensity of the stress phases

The fact of the interrelation of the two most pronounced phases can be explained by the fact that when tired of fighting

the increasing stress in the “resistance” phase, a person experiences a decline in the general energy tone and a weakening of the nervous system. The employee falls into a phase of "exhaustion", where emotional burnout becomes an integral part of the personality.

As the majority of respondents interviewed, responding to questions from this methodology, noted that after vacations and after entering the service from “sick leave due to temporary disability”, the state of emotional burnout is felt particularly acutely, the reluctance to take up work duties has a pronounced conscious character, one can identify the problem of unwillingness to work in full force among emp.

According to the method of diagnostics by K. Maslach and S. Jackson, adapted by N.Ye. Vodopianova, the data analysis shows that out of 80 people who took part in the survey, 26.7% people have a high level of professional burnout in terms of an integrated indicator that is negative in nature, as labor productivity decreases, and this incurs significant losses for the organization, 20% people have a very high burnout rate for the integral indicator, 26.7% people have emotional exhaustion at an average level - this means that it is worth considering about timely prevention to avoid negative consequences, and, accordingly, the remaining 26.6% of respondents have a low degree of emotional burnout.

Indicators of the questionnaire are presented in table 2.

TABLE II . INDICATORS OF THE QUESTIONNAIRE OF MBI (EMOTIONAL BURNOUT)

№	«Dissatisfaction»	«Zagnannost in a cage»	«Reduction professional duties»	«Emotional dispassionatenes»	«Personal dispassionatenes»	Total indicator
1	7	8	20	26	30	91
2	8	8	10	7	3	36
3	15	1	10	12	18	56
4	18	28	10	8	15	79
5	10	8	32	23	25	98
6	10	6	15	30	18	79
7	0	0	23	10	8	41
8	10	6	28	28	31	103
9	8	1	5	8	23	45
10	17	18	23	28	30	116
11	10	3	30	8	15	65
12	6	0	7	13	3	29
13	5	0	10	8	3	26
14	10	0	22	10	13	55
15	8	6	15	8	10	47

This test consists of 22 statements based on feelings and experiences which are connected about performance of the working duties.

According to general "key" score for each subfactor is counted. Assessment of extent of burning out can be carried out both for each separate indicator, and on an integrated indicator, for this purpose there are school estimates of four indicators: low, average, high and very high levels.

Results on the questionnaire of MBI are graphically presented on the drawing 3,4.

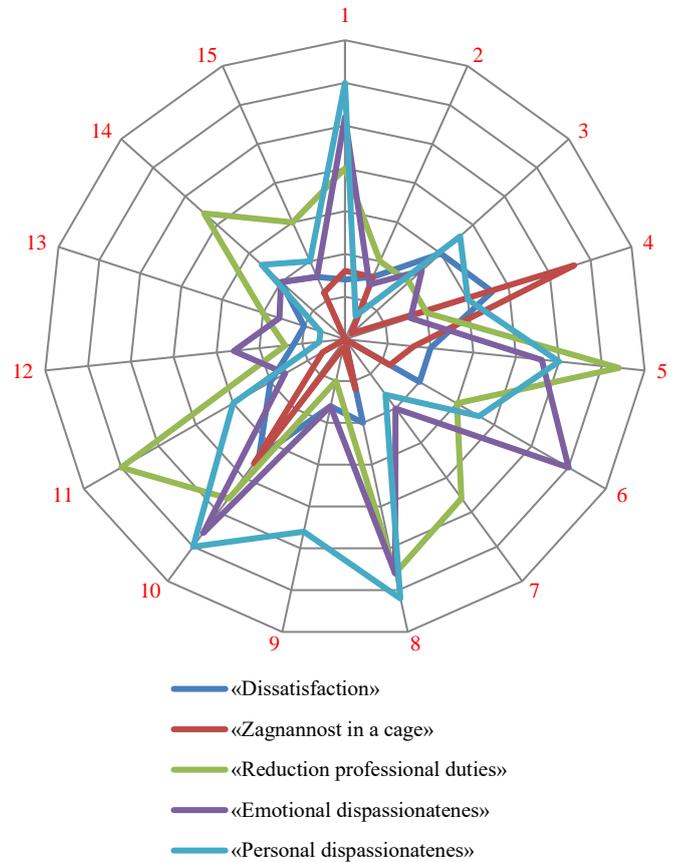


Fig. 3. Indicators of the questionnaire of MBI on scales

Also, comparing the length of experience of conductors with the results of assessing the level of professional burnout, we can note the following trend - the higher the work experience, the higher the level of professional burnout. Among employees who are just starting their professional activities (work experience up to 5 years), only 6% people have a high level of emotional burnout, while 13% people have an average level of emotional exhaustion. Burnout syndrome does not develop immediately; it takes a certain amount of time. But different people have a different period of development of the syndrome: someone “burns out” for 5-10 years, someone has an organism struggling longer, someone - less. This analysis is graphically presented in Figure 5.

At the last stage of the study, the calculation was made of the index of job satisfaction among the conductors with high and medium levels of professional burnout, developed by E.A. Scriptunov [6].

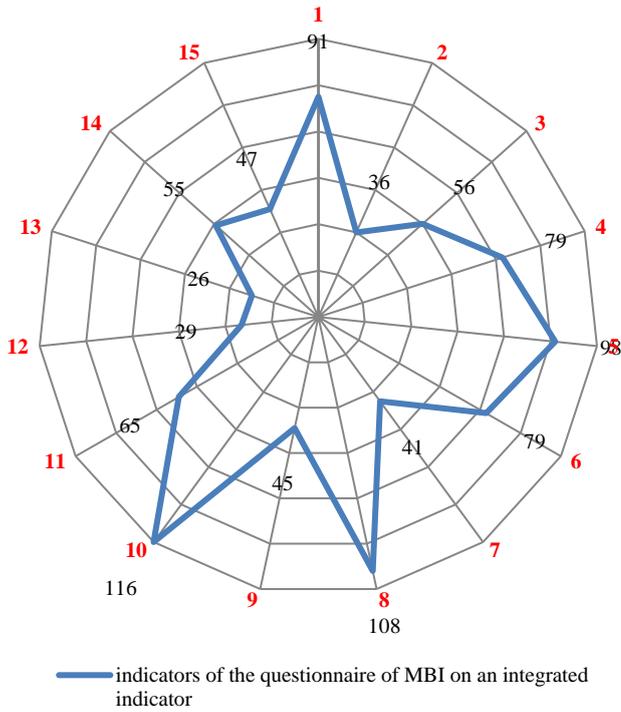


Fig. 4. Indicators of the MBI questionnaire for an integral indicator

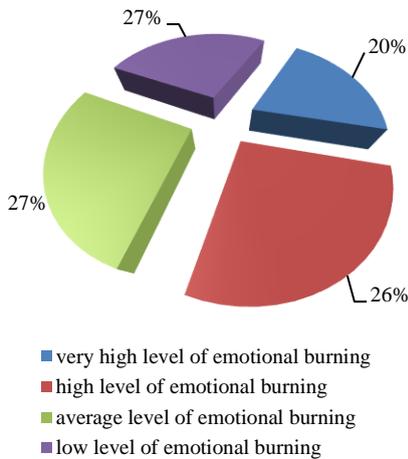


Fig. 5 Results of the analysis of level of emotional burning out on length of service

To calculate the satisfaction index, the questionnaire includes two questions with a list of factors of working life. The first question reveals the degree of influence of various factors on the overall employee satisfaction with work. The second question determines the actual satisfaction with each of their factors.

This analysis is graphically presented in Figure 6.



Fig. 6. Graphic display of satisfaction with working life of conductors

The analysis done showed that the staff was less satisfied with the following indicators: working conditions, work schedule [9,10], recognition of merits, management attitude, corporate culture.

Also, in the course of diagnostics of the assessment of professional burnout of employees, the methods of included observation, conversations, and the study of “Personal Affairs” were used, the data of which made it possible to conclude that the rigid regulation of conductor activity influences the formation of the professional burnout syndrome.

IV. CONCLUSION

Taking into account the object determined in the study, one

should pay attention to such problems in the field of professional burnout as: high level of emotional burnout; high level of professional burnout; high level of strict regulation; dissatisfaction.

.To reduce the level of negative consequences of the identified problems, it is necessary to develop measures, figure 7.

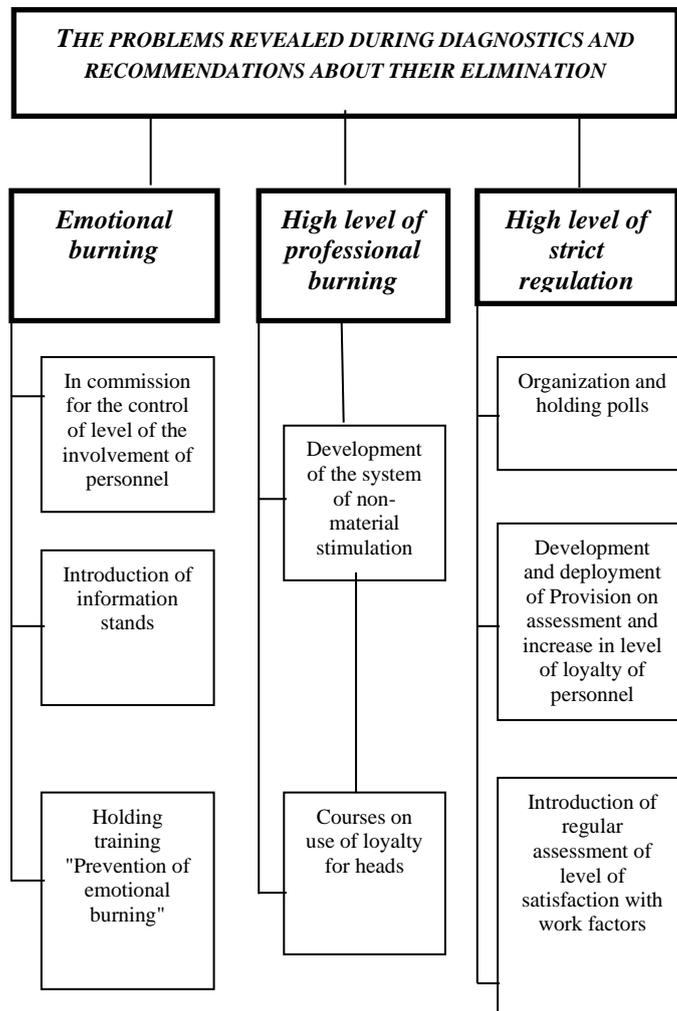


Fig. 7. Measures to reduce the negative effects of professional burnout

In addition to the activities aimed at eliminating professional burnout, it is necessary to develop several areas of activity, in particular:

- activities to eliminate emotional burnout, as a consequence of non-compliance with the professional requirements of resistance to stress;

- conducting familiarization activities on the main characteristics of human psychophysiology;
- creating a favorable atmosphere in the team;
- testing to determine deviations in the psychological state of employees (psychodiagnostics), evaluation of the data obtained about each individual employee;
- continuous mental counseling based on the results of the analysis of research data, providing the employee with valid information answers on his state of health in accordance with his age norm;
- continuous psychological adjustment - the impact on certain spheres of the employee's psyche for the successful achievement of mental balance in order to eliminate the resulting difficult situations and return to productive work.

These activities should be carried out by a special psychological service, which is responsible for the psychological state of the organization as a whole, and of each individual employee. These activities contribute to the primary prevention and secondary prevention of emotional burnout in the process of professional activity.

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